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ABSTRACT

The document reports results of a project by the Minnesota University Affiliated Program to develop a comprehensive description of current case management practices serving persons with developmental disabilities. While multiple sources were surveyed, county case managers, case manager supervisors, and county directors of human service agencies were considered to be three most important groups from which to obtain information for this study: of the 497 individuals surveyed in these categories, 332 responded for an average return rate of 67%. Questions asked concerned: training, case manager to client ratios, case load compositions, barriers to effective case management services, and percentages of time spent on case management functions. Results are reported in terms of questions such as the following: What are the education and training levels of human services personnel and other service providers? What are the staffing patterns typical in county human services agencies? What are the most common case manager supervisor-case manager ratios? Do waiting lists for services exist in county agencies? What are typical case manager-client ratios in Minnesota? Do case manager supervisors carry a case load? What are the most significant barriers to effective case management? What level of cooperative work exists between agencies? What are the major case manager responsibilities? How much time is devoted to case management functions? The survey identified major barriers to effective case management to be heavy caseload size, staff shortages, lack of day program options, too much paperwork, and insufficient funds. (DB)

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Minnesota • University Affiliated Program on Developmental Disabilities

SUMMARY OF THE

MINNESOTA CASE MANAGEMENT STUDY

Brief Report #88-2
April, 1988

The Minnesota Case Management Study was conducted by the Minnesota University Affiliated Program with a grant from the Governor's Planning Council on Developmental Disabilities

Investigators: Patricia McAnally, Ph.D.
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EC 211 816

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TABLE OF CONTENTS

Overview 1

Methodology 2

Education/Training Levels of Human Services Personnel 4

Education/Training Levels of Service Providers 7

Staffing Patterns in Human Service Agencies 8

Case Manager Supervisor - Case Manager Ratios 11

Waiting Lists 11

Case Manager - Client Ratios 12

Case Loads of Case Manager Supervisors 18

Optimal Supervisor - Case Manager Ratios 18

Barriers to Effective Case Management 20

Level of Cooperation between Agencies 24

Effectiveness of Case Management Function Accomplishment 26

Orientation of Clients by Case Managers 28

Major Case Manager Responsibilities 29

Time Devoted to Case Management Functions 30

Training Needs of Human Services Personnel 31

Summary 32

Recommendations 33

LIST OF TABLES

Table 1: Education Major and Academic Degree of Case Manager Supervisors and Case Managers by Frequency and Percentage of Response 5

Table 2: Number of Case Manager Supervisors Working in County Welfare and Human Service Agencies by Frequency and Percentage 9

Table 3: Number of Case Managers Working in County Agencies as Reported by Agency Directors by Frequency and Percentage 10

Table 4: Number of Clients with Developmental Disabilities Served by Case Managers According to Age Group 14

Table 5: Number of Clients Served by Human Services Case Managers Including those with and without Developmental Disabilities 16

Table 6: Client Case Load Size for Case Manager Supervisors by Frequency and Percentage 19

Table 7: Listing of Potential Barriers to Delivery of Case Management Services Rated by Human Services Personnel 21

MINNESOTA CASE MANAGEMENT STUDY

Overview

With increased numbers of individuals with developmental disabilities being served in the community, the coordination of appropriate services becomes an important immediate concern. The process of coordinating assistance to individuals with special needs which includes advocacy, monitoring, administration and service coordination is often described as case management services. The Developmental Disabilities Assistance and Bill of Rights Act of 1987 (P.L. 100-146) describes

> "the term 'case management activities' . . . [as] priority area activities to establish a potentially life-long, goal-oriented process for coordinating the range of assistance needed by persons with developmental disabilities and their families, which is designed to ensure accessibility, continuity of support and services and accountability and to ensure that the maximum potential of persons with developmental disabilities, productivity and integration into the community is attained." (Sec. 102)

In 1981, the Minnesota legislature passed amendments to Minnesota Statutes, section 256E.08, subdivision 1, thereby granting counties the authority and responsibility for assessment, protection of safety, health and well-being, and providing a means of facilitating access to services for citizens with handicapping conditions. A basic framework for a case management system was established by rules promulgated under this statute.

Rule 185, first promulgated by the Department of Human Services in 1977, was revised in 1981 and 1987. This rule establishes that the individual counties of Minnesota will be responsible for the provision of case management services to all persons with developmental disabilities[1] who reside in that county. The overall purpose is to "ensure that each person with mental retardation or a related condition who applies for services, or whose legal representative applies for services, receives a diagnosis and assessment of

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[1]For purposes of this study, the federal term "developmental disabilities" and the state term, "mental retardation or related conditions," will be used interchangeably.

current condition, and that, based on the information gathered, services are designed, arranged, provided, and monitored so that the services meet the level of the person's need in the least restrictive environment and in a cost-effective manner" (Rule 185, 9525.0025, subpart 2, line 4).

The Governor's Planning Council on Developmental Disabilities identified serious problems in case management in Minnesota and determined to assess the extent and nature of the problem. The Three-Year Plan contained testimony of the problems and priorities were set accordingly. In order to document and verify these testimonies, the Governor's Planning Council on Developmental Disabilities awarded a grant to the Minnesota University Affiliated Program (MUAP) on Persons with Developmental Disabilities to conduct this study.

To determine what adjustments need to be made in case management systems and in the areas of training and technical assistance for case managers, the current case management system and the functions performed by case managers at the present time must first be more clearly described. The MUAP conducted this survey to collect extensive data from multiple sources, including county case managers, case manager supervisors, and county directors of human services agencies so that a comprehensive description of current case management practices could be drawn from the information. The questionnaires solicited information on different aspects of case management, including training, case manager to client ratios, case load compositions, barriers to effective case management services, and percentages of time spent on case management functions. Analysis of these data provided information for describing current case management practices and for recommending strategies to improve case management services in Minnesota.

Methodology

Questionnaires were mailed to target groups in May 1987; follow-up questionnaires were mailed to nonrespondents in June. A telephone follow-up was conducted in July and by the middle of August, the data collection process was completed. The response rates for the primary target groups are shown below:

Target Group	Number Sent	Number Received	Response Rate
Primary Sample:			
County Directors	81	60	74%
County Supervisors	125	66	52%
Case Managers	291	206	71%
Subtotal:	497	332	Average: 67%
Secondary Sample:			
Service Providers	310	138	45%
Rehabilitation Counselors	148	67	45%
Advocates	66	35	53%
Public Health Nurses	75	31	41%
Consumers	275	37	14%
School Personnel	400	128	32%
Subtotal:	1,274	436	Average: 38.3%
Grand Total:	1,771	770	43%

County case managers, supervisors, and directors were considered to be the three most important groups from which to obtain information for this survey. Adequate response rates were obtained from the case manager and county director groups, namely, over a two-thirds majority.

What are the Education and Training Levels of Human Services Personnel?

In order to assess the level and content of education and training received by case management personnel, questions were asked regarding their academic degrees, major fields, and course work taken in case management and developmental disabilities.

Academic Training

Case manager supervisors and case managers working in county welfare and human service agencies were asked to identify their educational background in terms of academic major and degree. The majority of case manager supervisors and case managers held a bachelor's degree and the most common educational major was social work (see Table 1). (Throughout the study, the term "valid cases" is used to denote the number of respondents to a specific questionnaire item. "Missing cases" refers to the number of persons who failed to respond to the item. The "N" at the bottom of each table is the total number of persons in that group [directors, case manager supervisors, or case managers] who completed a questionnaire).

Supervisors and case managers were asked whether any college courses they had taken provided training in case management. Nearly all of the 37 supervisors responding indicated that they had no courses in case management prior to their employment as supervisors. After employment as well, most supervisors (86%) indicated that they had no college training in case management. The greatest percentage (80%) of the 195 case managers responding to the survey indicated that they had no formal coursework in case management. One to eight courses had been taken between 1970 and 1980 by 9% of the respondents, and one to four courses were taken between 1981 and 1987 by 5% of the case managers.

Supervisors and case managers were then asked about specific college courses they had taken in the field of mental retardation and other related conditions (developmental disabilities), both before and after employment as case manager supervisors. Of the 36

Table 1

Education Major and Academic Degree of Case Manager Supervisors and Case Managers by Frequency and Percentage of Response

Case Manager Supervisors

Educational Major	Frequency of Response	Percentage of Response	Valid Cases
No Response	0	0	44
Social Work	25	57	
Psychology	8	18	
Criminal Justice	0	0	
Sociology	9	20	
Education	0	0	
Other	2	5	

Academic Degree	Frequency of Response	Percentage of Response	Valid Cases
Baccalaureate	33	56	59
Master's	26	44	
Doctorate	0	0	
Other	0	0	

Case Managers

Educational Major	Frequency of Response	Percentage of Response	Valid Cases
No Response	37	20.5	180
Social Work	74	41	
Psychology	17	9	
Criminal Justice	1	.5	
Sociology	25	14	
Education	10	6	
Other	16	9	

Academic Degree	Frequency of Response	Percentage of Response	Valid Cases
Baccalaureate	166	86	194
Master's	22	11	
Doctorate	0	0	
Other	6	3	

Note: N = 59 Case Manager Supervisors

N = 195 Case Managers

supervisors responding, 61% indicated that they had taken no course work in the field of developmental disabilities, while over 38% indicated that they had at least one course in developmental disabilities before they became a case manager supervisor. One of the most significant findings was that 97% of the 34 responding supervisors indicated that they had no courses in developmental disabilities since becoming a case manager supervisor.

Among case managers, 55% of the respondents reported taking no course work in developmental disabilities and 23% taking only one or two courses in the area.

Directors were not asked to provide information regarding their educational background and training.

Inservice Training

Case manager supervisors were asked about inservice training experiences in both case management and developmental disabilities. Of the 31 supervisors responding, 16% indicated that they had received no inservice training in either case management or developmental disabilities, while 84% indicated that they received inservice training in both areas. The number of inservice training experiences of each supervisor ranged from a low of 0 to a high of 14, with the average number of inservice experiences being three. The majority of these inservice training sessions taken by supervisors occurred between the years 1981 and 1987.

For case managers, inservice experiences in case management and developmental disabilities were fairly evenly divided between the two topics. The range was from no (0) sessions to 50. Of the 164 respondents, 88% received most of their inservice training between 1981 and 1987, 12% between 1970 and 1980, and a single respondent had inservice training on these topics prior to 1969. The average number of inservice sessions for the 1981-1987 group (164 respondents) was 5.5 sessions.

What are the Education and Training Levels of Other Service Providers?

Similar questions were asked regarding education and training of school personnel, rehabilitation counselors, advocates, and public health nurses.

Academic Training

Of the 126 school personnel responding to the survey, 55% held bachelor's degrees, and 45% master's degrees, or above in education. Rehabilitation counselors responding numbered 62. The majority had attained a master's degree and were majors in psychology. Individual respondents (29) from advocacy organizations came from a variety of educational backgrounds. Of the group, 55% held bachelor's or master's degrees, and an additional 10% held specialist certificates or doctorates. Almost all the public health nurse respondents (97% of the 30) were licensed as public health nurses and 86% of the group were also registered nurses (RN). Educational background was not requested of service providers and consumers.

Training

Among special education case managers (68 respondents), 80% had taken either one or no course work in case management. In training in the area of severe disability, 38% of the respondents had taken course work (from one to five courses). Of 127 respondents, 64% had no course experience in transition planning. The majority of respondents held licensure in the area of Educable Mentally Handicapped (EMH) and elementary education.

Rehabilitation counselors (65 respondents) were fairly evenly divided in previous training in the area of developmental disabilities. Of the group 52% indicated that they had training in the area and 48% had none. Nearly all (97%) had no training in individual habilitation planning and linking and brokering of services.

The majority of the advocates (29) had taken no course work or workshops on case management and 35% indicated some formal training in the area of developmental

disabilities. Brokering or negotiating for services was an area where few advocates had previous training.

Of the 30 public health nurses responding, the majority had taken no course work in case management. When asked about previous training in the area of developmental disabilities, only one-third of the group responded, a response rate too small to be significant.

What are the Staffing Patterns Typical in County Human Services Agencies?

Directors of county human services agencies were given a set of questions related to the number of case manager supervisors, case managers, and case management aides employed by their agency.

Directors' Response

The first part of the survey was directed to the number of personnel performing case management functions in the county agency. Of the 60 respondents, representing 62 counties, 13% had no supervisors, 23% employed only a part-time supervisor, and 52% employed one full-time supervisor for the agency (see Table 2). Thus, 88% of the directors reported one or fewer supervisory personnel with larger counties, as expected, employing the larger number of supervisors.

Directors were asked to indicate the number of actual case managers by calculating full-time equivalents (F.T.E.) working in the county agency (see Table 3). Over half of the counties employed between one and two case managers, with four of the large counties employing between 26 and 44 case managers. The average number of case managers per county agency was 5.14, with a range of 1 to 44 F.T.E. case managers. Though it was not possible to separate rural from urban, it can be safely assumed that the larger numbers of case managers would be employed in urban settings.

Table 2

Number of Case Manager Supervisors Working in County Welfare and Human Service Agencies by Frequency and Percentage

Case Manager Supervisors	Frequency	Percentage
0	8	13
.1 - .9	13	23
1.0 - 1.9	31	52
2.0 - 2.9	1	2
3.0 - 3.9	3	5
4.0 - 4.9	2	3
5.0 - 6.9	1	2
7.0	1	2

Note: N = 60
Valid Cases = 60
M = 1.10
Standard Deviation = 1.29

Table 3

Number of Case Managers Working in County Agencies as Reported by Agency Directors by Frequency and Percentage

Case Managers	Frequency	Percentage
1.0	16	27
1.2	1	2
1.4	1	2
1.5	3	5
2.0	12	20
2.5	1	2
3.0	5	8
3.5	1	2
4.0	7	12
5.0	2	3
6.0	1	2
7.0	1	2
8.0	1	2
8.3	1	2
9.0	2	3
12.0	1	2
26.0	1	2
35.0	1	2
38.0	1	2
44.0	1	2

Note: N = 60
Valid Cases = 60
M = 5.14
Standard Deviation = 8.75

Information was requested regarding the number of case management aides or paraprofessional workers in each county agency. Forty-four percent of the directors indicated that the agency employed no case management aides, 7% a part-time case management aide, and 32% employed one full-time aide. The range was 0 to 12 case management aides.

The amount of case management aide time devoted to assisting the case manager was determined according to full-time equivalents (F.T.E.) from none to one full-time individual. The majority (60%) of the case managers had no case aide assisting them, while 25% received from 1% to 25% of the case management aide's time.

What are the Most Common Case Manager Supervisor - Case Manager Ratios?

When asked a question about the average number of case managers assigned to the supervisors, supervisors responded with a range of one to 16, with the average about 5.5 case managers to a supervisor. In smaller agencies, either the Director served as supervisor or the number of case managers was too few to employ a full-time supervisor.

In response to a question concerning number of case manager supervisors in the agency, 67% of the supervisors indicated that their agency had one supervisor in contrast to the Directors who reported that 52% of the agencies employed only one supervisor. The difference might be explained in that some supervisors completed the survey when their director did not. The other 33% of the supervisors reported a range between two and seven case manager supervisors working in their agency.

Supervisors were then asked how many case manager supervisors they thought there should be. Responses ranged from zero to 14 with an average of about two case manager supervisors in the agency. Again, responses related directly to the size of the agency and the relative need for supervisory personnel.

Staffing patterns were not addressed in the case manager survey.

Do Waiting Lists for Services Exist in County Agencies?

Directors and case manager supervisors were questioned about whether case management services have been provided to all persons with developmental disabilities meeting the county's criteria for service. Eight of the 60 respondents (13.3%) did not answer this question. Eighty-three percent of the directors indicated that case management services had been provided to all, while 17% felt that not all who were eligible were receiving service. Most of the 59 case manager supervisors (84%) responding to this question, indicated that all eligible were receiving services, while 16% reported that some individuals were not.

All 60 directors responded to the question of whether the agency had a waiting list for persons with developmental disabilities in need of service. The question assumed that eligibility for these individuals had been determined. The majority (88%) of both directors and supervisors indicated that no waiting list existed, while the remaining 12% said that there was such a list.

A follow-up question for those who responded that there was a waiting list asked whether those on such a list were provided interim services. Of those directors who indicated that the agency had a waiting list (12%), the majority of this group (75%) indicated that interim services were provided as described, while 25% of this group indicated that no services were given. The majority (70%) of case manager supervisors who indicated that there was a waiting list reported that interim services were provided to those on the waiting list, while 30% reported that they did not provide interim services.

No comparable question was asked of case managers.

What are Typical Case Manager-Client Ratios in Minnesota?

Case managers were asked how many persons with mental retardation or other related conditions were currently served, including persons served by case management aides under their direction.

Of the 192 case managers, it was reported that 4.4 percent of their client population with developmental disabilities were children from birth to five years; 12.5% were between the ages of 6 and 21 years; and 83% of their clients were adults (see Table 4 for number of clients served by age group). It may be assumed that school districts provide the case management services for the greater number of school-aged children. Thus, the higher percentage of the population being served by human services case managers appears to be adults. Figure 1 illustrates case loads of both clients with and without developmental disabilities as reported by case managers. When asked how many clients in their case load did not have developmental disabilities, 45% of the case managers indicated that their case load was composed totally of individuals with developmental disabilities. There was, however, a wide range of responses; one individual indicated that he/she serves 181 clients in addition to those with developmental disabilities (see Table 5). The mean ratio of case manager to client with developmental disabilities was 1:55, but 1:68 when both groups of clients were counted.

A follow-up question asked the total number of clients with developmental disabilities in the case manager's case load who were assigned an IQ below 35. The range of clients for whom these characteristics applied was none (0) to 110. Results were fairly evenly distributed with the majority of case manager respondents indicating that they had 11 to 20 clients in the severe/profound range of functioning in their case load.

When asked about their client population who may be diagnosed in the severely to profoundly retarded range and who also manifest behavior problems, the majority (67%) of

Table 4

Number of Clients with Developmental Disabilities Served by Case Managers According to Age Group

Number of Clients	Frequency of Case Manager Response	Percentage of Response	M	S.D.	Valid Cases	Missing Cases
		Age: Birth to 5 years				
0	93	49	2.48	4.05	188	7
1 - 5	68	37				
6 - 10	19	10				
11 - >	8	4				
		Age: 6 - 21 years				
0	27	14	6.94	7.83	190	5
1 - 5	72	38				
6 - 10	51	27				
11 - 15	24	14				
15 - >	16	7				
		Age: Adults				
0	8	4.2	45.58	26.33	192	3
1 - 20	23	12				
21 - 40	44	22.9				
41 - 60	75	39.1				
60 - >	42	21.8				
		Totals				
1 - 20	17	9	55.01	25.44	192	3
21 - 40	34	18				
41 - 60	73	38				
61 - 90	68	35				

Note: N = 195

PROPORTION OF CLIENTS
WITH AND WITHOUT DEVELOPMENTAL DISABILITIES

Clients with Developmental Disabilities 81.2%

Clients without Developmental Disabilities 18.8%

Figure 1

Table 5

Number of Clients Served by Human Services Case Managers Including Those with and without Developmental Disabilities

Number of DD Clients	Number of Non-DD Clients	Total	Number of DD Clients	Number of Non-DD Clients	Total	Number of DD Clients	Number of Non-DD Clients	Total
11	5	16	25	15	40	50	0	50
17	0	17	40	0	40	50	0	50
19	0	19	40	0	40	50	0	50
19	0	19	32	10	42	40	10	50
19	2	21	33	9	42	25	26	51
14	10	24	32	12	44	51	0	51
23	4	27	45	0	45	12	40	52
30	0	30	42	3	45	52	0	52
30	1	31	44	1	45	50	2	52
32	1	33	45	0	45	52	0	52
34	0	34	20	25	45	26	26	52
35	0	35	34	12	46	52	0	52
35	0	35	47	0	47	50	2	52
35	0	35	47	0	47	53	0	53
36	0	36	48	0	48	50	3	53
36	0	36	48	0	48	54	0	54
36	0	36	48	0	48	54	0	54
36	0	36	18	30	48	54	0	54
38	0	38*	49	0	49	54	0	54
10	29	39	46	3	49	53	1	54
20	19	39	50	0	50	55	0	55
20	20	40	50	0	50	55	0	55
25	15	40	50	0	50	8	47	55
53	2	55	50	0	50	35	20	55
56	0	56	61	0	61	30	25	55
56	0	56	61	0	61	61	6	67
38	18	56	60	1	61	68	0	68
56	0	56	62	0	61	48	20	68
56	1	57	60	2	62	67	2	69
55	2	57	50	12	62	66	3	69
57	0	57	62	0	62	61	8	69
55	2	57	59	3	62	69	0	69
55	2	57	62	1	63	70	0	70
51	6	57	60	3	63	70	0	70

Table 5 (Continued)

Number of DD Clients	Number of Non-DD Clients	Total
58	0	58
58	0	58
58	0	58
58	0	58
53	5	58
59	0	59
59	0	59
58	1	59
57	2	59
60	0	60
60	0	60
60	0	60
70	5	75
50	25	75
44	31	75
75	1	76
76	0	76
69	7	76
51	25	76
56	20	76
37	40	77
75	3	78
66	12	78
40	39	79
79	0	79
66	14	80
80	0	80
80	0	80
61	20	81
72	10	82
14	70	84
40	45	85
68	17	85
66	20	86
56	30	86
63	0	63
58	5	63
35	30	65
50	15	65
65	0	65
65	0	65
65	0	65
65	0	65
40	25	65
66	0	66
66	0	66
65	2	67
76	10	86
78	10	88
61	28	89
44	45	89
41	50	91
93	0	93
82	11	93
41	55	96
82	14	96
36	61	97
100	0	100
75	25	100
100	2	102
15	89	104
98	7	105
103	2	105
110	0	110
108	4	112
90	25	115
70	40	110
94	24	118
75	45	120
70	0	70
70	0	70
70	0	70
70	0	70
71	0	71
71	0	71
72	0	72
68	5	73
68	5	73
65	8	73
72	1	73
74	0	74
75	0	75
142	0	142
12	140	152
50	103	153
44	120	164
9	171	180
188	1	189
196	0	196
60	140	200
60	181	241
	TOTALS	
10,614	2,463	13,077
N = 55.28	N = 12.83	N = 68.11

Note: N = 192 case managers

* Part-time person

case managers indicated that one to ten clients met such a description. Of the client population with IQ scores above 35 who also have significant behavior problems, results were similar to the previous item, namely, that the majority of case managers have one to ten clients for whom these characteristics apply.

In summary, only 3.6% of the 192 case manager respondents had case loads of 30 clients or less. Fifty-five percent of those respondents had a combination of clients with and without developmental disabilities. Adding to the fact of heavy case loads was the finding that the majority of case managers had some clients with severe behavior problems either in the severe-to-profound functioning range or in the moderate-to-mild range. It would appear that the complexity of these problems would add considerably more time in services coordination than for those clients for whom such characteristics did not apply. The most significant finding, however, was that the average case load of clients with and without developmental disabilities was over 68 persons, a ratio twice that used by other states as a standard for effective case management.

Among rehabilitation counselors (66), case loads were found to be exceptionally high ranging from 1 to 400 clients with a mean of 159. Of this number about 50% of the clients had developmental disabilities.

In contrast, public health nurses (30) served between 1 and 20 persons with developmental disabilities representing from every age group in their case load.

Do Case Manager Supervisors Carry a Case Load?

Supervisors were asked if they also carried a client case load in addition to supervisory duties. All supervisors responded, with 17% reporting that they did carry a case load, and 83% that they did not. Of those supervisors indicating that they carried a case load, 15 supervisors reported a typical case load ranged from 1 to 95 with a mean of over 37 clients. Table 6 shows the results. Over half of the respondents had case loads of 1 to 15 clients in addition to their supervisory duties.

Table 6

Client Caseload Size for Case Manager Supervisors by Frequency and Percentage

Size of Client Caseload	f	%	Mean	S.D.	Median
1 - 5	6	40	37.27	34.85	12.0
6 - 10	1	7			
11 - 15	1	7			
16 - 20	0	0			
21 - 25	0	0			
26 - 30	0	0			
31 - 35	1	7			
36 - 80	1	7			
41 - 45	1	7			
46 - 50	0	0			
51 - 60	1	7			
61 - 70	0	0			
71 - 80	0	0			
81 - 90	2	13			
91 - 100	1	7			

Note: N = 59
Valid Cases = 15

Since directors did not typically carry a case load, no questions regarding this issue were asked.

What do Directors Consider the Optimal Supervisor-Case Manager Ratio?

Directors were asked their opinion regarding the optimal ratio of supervisors to case managers. The range was a ratio of 1:4 to 1:20 supervisors to case managers. The most common responses clustered between 1:6 and 1:8.

What are the Most Significant Barriers to Effective Case Management?

This section was designed to identify possible barriers to the successful delivery of case management services and to rate the severity of the barrier on a Likert scale of one (never a barrier) to five (always a barrier). Table 7 provides a listing by general topic of potential barriers to which human services' personnel were asked to respond.

Only public health nurses and rehabilitation counselors were asked to respond to what they felt might constitute barriers to effective case management in addition to human services personnel.

The directors considered the most serious barriers (means of 3.5 or above) to be the amount of paperwork required of the case manager, with client case load size (too large), and the number of required meetings to attend, ranking next highest in severity, respectively. The two considerations felt to be least likely a barrier were the degree to which the case manager must interact with other agencies, and the level of the client's disability.

Like the directors, the case manager supervisors identified the most frequent barriers to delivery of case management services as the amount of paperwork required (mean of 4.2) and the current case load size (mean of 3.7). Next on the list in terms of most likely to be a barrier was the number of meetings case managers were required to attend. Factors considered least likely (seldom to never) to be barriers to effective case

Table 7

Listing of Potential Barriers to Delivery of Case Management Services Rated by Human Services Personnel

Rating System:	1 Never a Barrier	2 Seldom a Barrier	3 Often a Barrier (<50% of the time)	4 Almost Always a Barrier	5 Always a Barrier

GENERAL CONSIDERATIONS

1. Client's level of disability
2. Service providers
3. Lack of training information
4. Lack of family involvement
5. Degree to which case manager will have to interact with other agencies
6. Time/distance to client residence
7. Case manager's current case load size
8. Amount of paperwork required of case managers
9. Number of meetings case managers are required to attend

STAFFING

10. Staff shortages
11. Staff turnover
12. Reduction in force of management staff

PROGRAM AVAILABILITY

13. Lack of residential program options
14. Lack of day program options
15. Lack of other program/service options
16. Difficult access for program/services

FUNDING

17. Insufficient funds
18. Delays in receiving funds for client services
19. Restrictions in use of funds

COUNTY ADMINISTRATION

20. Lack of routine planning and coordination within one agency
21. Internal reorganization

INTERAGENCY ADMINISTRATION

23. Lack of routine planning and administration
24. Difficulty in communications
25. Confidentiality issues
26. Lack of understanding about resources
27. Inappropriate referrals
28. Duplication of services
29. Multiple individual plans for single client
30. Clients "falling into the cracks" between agencies
31. Lack of clear understanding of which agency is responsible for client's case management
32. Multiple case managers/client coordinators for a single client

management were: interaction with other agencies, the client's level of disability, lack of case manager experience, service providers, and lack of family involvement.

Like the reports of the other two groups, case managers, themselves, indicated that the amount of paperwork was the most significant barrier. The current client case load size and the number of required meetings were noted as relatively serious barriers as well. The client's level of disability was least likely to be a barrier as rated by the case managers.

For the 21 vocational rehabilitation counselors who responded, the major barriers identified were: (a) the amount of time required of the case managers to interact with other agencies, (b) the current high case load, (c) the amount of paperwork, and (d) the number of meetings required.

The majority of public health nurses also agreed that the amount of paperwork required and amount of time for interacting with other agencies were barriers to effective case management. The area least likely to be a barrier was travel, time, and distance to the client's residence.

The second part of the "barriers" section pertained to staffing as it related to the delivery of case management services. Staff shortages, turnover, and lay-offs in case management staff were assessed in this section. Directors indicated that staff shortages were considered a serious barrier, while staff turnover and lay-offs in case management staff appeared not to be a problem by the majority of respondents. According to supervisors, the staff shortage was found to be most likely a barrier with a mean of 3.39 ranked in the "often" to "almost always a barrier" categories. Consistent with the directors and supervisors perceptions, the case managers also reported staff shortages as the most significant barrier. Reduction in the work force and lay-offs were reported as least likely to be barriers as reported by the case managers.

To determine when staff turnover appeared to be a problem in delivering case management services, directors were asked if the 1986 calendar year's turnover rate was high enough to be a barrier. Of the 58 valid cases, 90% indicated that turnover of staff was not a problem. In direct contrast, 93% of the 56 case manager supervisors believed that staff turnover was a barrier. When asked what could be done to reduce case manager turnovers, 72% of the 43 supervisors indicated that less paperwork would be of help, while almost 14% mentioned that reducing the staff-to-case load ratio would make a positive difference.

Among the vocational rehabilitation counselors, staff shortages and lack of day and residential program options were considered to be often a barrier.

The third section of the barriers question related to the availability of services. Lack of program or other service options appeared to be one area which the majority of directors agreed was a serious barrier, with lack of appropriate residential services falling next in line. Similarly, case manager supervisors reported the most serious barrier in this section to be lack of program or other service options. Case managers 74%) reported that lack of residential program options fell in the categories of "often" to "always a barrier." In contrast to directors' and supervisors' perceptions of the problems, case managers felt that lack of program and other service options did not constitute a barrier.

The next portion of the barriers section dealt with funding issues. Directors, supervisors, and case managers named two problem areas as serious barriers: insufficient funds and restrictions in the use of funds with means over 3.5.

The majority of the vocational counselors (21) indicated that insufficient funds was a problem (often to always). Over half of the respondents also noted that restrictions in funds was a barrier to effective service delivery.

County administration issues such as routine planning, coordination between units, and internal reorganization did not appear to pose any serious barriers to provision of case management services for directors, supervisors, and case managers.

For most of the items listed under interagency administration the majority of directors felt that potential problems listed were seldom barriers to service. These were: lack of routine planning, difficulty in communication, confidentiality issues, lack of information about other agency resources, inappropriate referrals, duplication of services, multiple individual plans for a single client, clients "falling into the cracks" between agencies, lack of clear understanding of which agency is responsible for case management, and coordination problems with multiple case managers. The only item that was fairly evenly split regarding director opinion was the concern over multiple individual plans for a single client.

Similarly, the majority of supervisors failed to cite any of the interagency administration issues as problematic, the highest mean score being 2.37 for the barrier "multiple individual plans for a single client." Case managers generally did not find specific problems in interagency administration; however, 51% of the respondents indicated that there were clients who "fell into the cracks" of the delivery system. One item appearing to be the least problem was inappropriate referrals. From the data, it would appear that referring agencies are aware of guidelines for referral and thus, refer appropriate candidates for services.

What Level of Cooperative Work Exists Between Agencies?

The next section employed a four-point scale from (1) -- no cooperative work to (4) -- much cooperative work -- between the human services agency and other agencies in the area. The level of cooperation which currently exists was rated first and then what the directors indicated "should be" was rated in another column. The listing of agencies follows:

A. State Department of Human Services,

B. Local School District(s),

C. Local Office of Rehabilitation Services,

D. Mental Health Center,

E. Criminal Justice System,

F. Day Training and Habilitation Providers (formerly called Developmental Achievement Centers),

G. Residential Providers,

H. Rehabilitation Facilities (formerly called Sheltered Workshops),

I. Voluntary Advocacy Agencies (e.g., ARC, UCP),

J. Community Associations (e.g., religious or civic clubs),

K. Social Security Office,

L. University,

M. Area Vocational Technical Institute, and

N. Other.

Directors

Directors rated the level of cooperative work which exists between agencies and gave a projection of what "should" exist (the ideal) between agencies in the opinion of the director . The majority (67%) of the directors indicated that there was "moderate" to "much" cooperative work between their agency and the State Department of Human Services, with 98% indicating that there should be more cooperation between their agency and the Department of Human Services. The least cooperative work appears to exist between the following: the county human services agency and the university; and the county agency and community associations. Other low-ranked targets of cooperative work were (from the least upward): the Area Vocational Technical Institute (AVTI), community associations, (e.g., religious, civic clubs) voluntary advocacy organizations, and

the criminal justice system. The majority of directors indicated a current emphasis on "moderate" to "much" cooperative work between the county welfare and human services agency and all other agencies. As expected, those agencies administered by or funded through the State Department of Human Services showed high levels of cooperative work, such as the county human service agencies (67%), the Developmental Achievement Centers (DACs) (89%), and the mental health centers (77%). Other placement options for persons with developmental disabilities also ranked high: residential service providers (96%), sheltered workshops (81%), school districts (74%) and the DACs mentioned above.

Of the respondents, 61% indicated that cooperation with social security and local rehabilitation personnel ranked in the moderate to much range which might reflect the percentage of clients eligible for these services.

Case Manager Supervisors

The supervisors reported the most cooperative work between their agencies and the Developmental Achievement Centers, residential providers and sheltered workshops. Supervisors indicated that they would like to see much more cooperation between their agencies and almost all of the other agencies.

Case managers were not asked about administrative concerns regarding cooperative work between agencies.

Which Case Management Functions Accomplished are Rated Least/Most Effective?

In an effort to determine how effective each of the case management functions are being accomplished in the human services agencies, directors, supervisors, and case managers were asked to respond to the question: "How effective is the case management service delivery provided by your agency for each service function?" Each of the twelve functions of case management outlined in Rule 185 was listed and personnel were asked to rate the accomplishment of these on a five-point scale: (1) being "not effective" and (5) being "very effective."

Directors

The majority of directors rated functions of intake, assessment, coordination, and advocacy functions as most effectively accomplished. Planning, preparing the individual habilitation plan (IHP), recordkeeping, support, linking and brokering, follow-up, discharge, counseling, and overall effectiveness of case management in the agency were considered less effective. The least effective areas appeared to be recordkeeping and monitoring/follow-up.

Supervisors

The same rating form was provided to case manager supervisors. The average ratings for each of the twelve functions ranged from a low of 3.26 for recordkeeping to a high of 4.26 for intake services. The supervisors' ratings of overall effectiveness produced a mean of 3.91 with a range of ratings from two to five. Over half of the supervisors rated the case management services as 4.0, or effective. Intake, assessment, and advocacy were rated the most effective of the functions provided by the case managers and recordkeeping as the least effective.

Case Managers

For case managers, the same twelve case management functions were listed with each item rated by overall effectiveness of the case management delivery system. Those functions which case managers ranked the most effective were support and advocacy functions, while the one ranking lowest was development of the Individual Habilitation Plan (IHP). All functions, except development of the IHP, rated means of 3.4 or above (moderately to very effective). Overall effectiveness was judged to be between moderately effective to effective which indicates a fairly high level of satisfaction with system effectiveness. In summary, recordkeeping appeared to be rated the lowest in functioning and intake and support were rated highest of two of the three groups polled.

Among the 131 service providers who responded to the survey, representing residential and day programming for persons with developmental disabilities, the majority of respondents indicated that development of the Individual Habilitation Plan (IHP) and recordkeeping were the least effectively performed. The highest rated function (slightly above "moderately effective") was the function of intake.

The majority of school personnel (95 respondents) indicated that they were responsible primarily for school-based, rather than community-based services. Questions regarding the effectiveness of the functions performed by county case managers were not asked of this group. However, coordination and activities with other agencies was ranked low by the school personnel group. The activity considered most effectively carried out by the school case managers was developing the individual education plan (IEP).

Vocational counselors working in the Division of Rehabilitative Services (DRS) operate under a different rule than do county human services' case managers. It was interesting to note that the majority (67%) of the vocational counselors (67) responding were unaware of Rule 185 and the functions of county case managers. Only one-third of the counselors rated the effectiveness of the case manager functions and these indicated an overall score of moderately effective.

Individuals from advocate organizations rated the effectiveness with which case management functions were carried out by county case managers. With the exception of the intake function, all other functions were rated poorly (slightly effective), with monitoring and follow-up being the lowest.

In evaluating the effectiveness of their own case management delivery systems, public health nurses ranked planning, intake, coordination, and support services (effective" (4.0) to highly effective (5.0) on the Likert scale. It is interesting to note

that assessment, planning, and coordination areas which were noted to take the highest percentage of time were also ranked highest in effectiveness.

Consumers were asked to rank the effectiveness of services they had received from "not helpful" to "very helpful." Interestingly, the highest ranked categories were advocacy and recordkeeping. The lowest ranked was counseling, while the remainder fell into the "helpful" group.

How do Case Managers Orient their Clients?

Case managers were questioned about their methods of orienting clients and their families to the case management system. It was found that the majority of the case managers provide orientation to the client and his/her family to case management services, explaining the process. A smaller percent of case managers (39% and 44%, respectively) (a) informs them of the opportunity to gain a new case manager if dissatisfied and (b) contacts the family before the review meeting.

Case managers were asked how important they believe it is for the client to participate in the individual service plan (ISP) meeting. Of the 181 respondents, 82% considered client/family participation very important. Of the remainder, 17% indicated that it was somewhat important and 1% felt that it was not important to include the client.

When asked how often consensus is reached at the end of the service plan reviews in which the case manager participates, 72% indicated that consensus was always reached, while 27% indicated that it was sometimes reached.

Prior preparation by the case manager with the client and his/her family in 33 consumer cases showed that 58% of the consumers were so prepared, while the remaining 42% had no such preparation with the case manager. Of the 60 vocational counselors, 65% did not provide information on case management services offered by the Department of Human Services. An overwhelming majority of the public health nurses solicited

parent/client input in the service plan meeting and also oriented the family to services, though slightly less than half indicated that they explained the case management process to their clients and/or their families.

What are the Major Case Manager Responsibilities?

A list of responsibility statements which were derived from case management functions listed in Rule 185 was presented to the case managers. These statements follow: (a) ensure that the individual service plan is written; (b) ensure that the service plan review meeting is held; (c) ensure that the resulting plan update is developed jointly by those invited; (d) ensure that the client's views are heard and integrated into the plan; (e) advocate for the client when he/she disagrees with the rest of the team; and (f) write the revised plan document and distribute it to client and team members. Case managers were asked whether these were current responsibilities and if these responsibilities should be undertaken by the case manager. All six responsibility statements were considered by the majority of case managers to be appropriate responsibilities under the categories of both "current" and what "should be." The highest percentage fell under "ensuring that the service plan review meeting is held."

Two questions were asked regarding the clients and their parents or guardians taking an active role in procuring, adapting, and arranging the services identified in the individual service plan. The first question addressed the client's/family's level of knowledge about the subject, and the second asked whether families were actively involved in procuring services. The majority of case managers (87%) said that clients/families were aware of their right to take an active role in gaining services "sometimes" (3) to "always" (5), while the remainder (13%) indicated that they were "seldom" or "never" aware of these rights. Case managers reported that 58% of the clients or their guardians "sometimes" to "always" take an active role in gaining services. The data showed that clients, parents, and guardians may have the information about

their rights to be their own case managers, but they may not exercise this right or feel they do not have the skills or time to do so.

How Much Time is Devoted to Case Management Functions?

Case managers were asked if they typically performed particular case management functions, and if "yes," what percentage of their time was devoted monthly to each. The majority (60%) responded that all of these functions were typical of their duties with intake being the least time-consuming (2.36% of their time monthly). This may be due to the assignment of intake responsibilities to another person in the agency. The highest mean percentage of time was devoted to developing the IHP (18.32%) and the second highest to recordkeeping (17.62% per month), and the lowest percentages of time were devoted to intake and discharge responsibilities.

Of the consumer group (17 respondents), 54% indicated that they received 18 minutes or less of the case managers time per month. The range of time was considerable -- no time per month to 4.5 hours per month.

For service providers monthly time spent in paperwork tasks averaged three hours per client and ranged from 12 minutes to 15 hours. Time spent in meetings monthly ranged from none to ten hours monthly with 63% of the 101 respondents spending an hour or less in meetings each month per client.

Among public health nurses, the greatest percentage of time appeared to be devoted to assessment, recordkeeping, planning, and coordination, and the least time to discharge and advocacy functions.

What are the Training Needs of Human Services Personnel?

Case Manager Supervisors

Lastly, supervisors were asked about their own training needs. A list was provided with a range of topics which they were asked to check if any of these would fulfill a current need for training. The most commonly cited training need for supervisors was

learning how to monitor the quality of service to individual clients. The next most frequently checked items were: (a) assisting clients and families to become their own service coordinators, and (b) learning methods for negotiating with clients and service providers when the client disagrees with individual service plan components.

Case Managers

In response to an item which listed potential training need topics, the case managers marked the following as most necessary: (a) methods for negotiating with clients and service providers when there is a disagreement, (b) methods for creative problem-solving and for thinking innovatively, (c) how to develop an individual habilitation plan, (d) methods for procuring accurate information related to service options, and (e) how to assist clients in becoming their own case managers. The item least frequently marked was information on history, normalization and values. It would appear that the history of services to persons with developmental disabilities and the evolution of philosophy and services would be knowledge critical to case management personnel. The number of respondents ranged from 29 to 108 depending upon the item.

Directors were not asked about training needs.

Summary

Case Management Supervisors

The most notable barriers considered by the case manager supervisors were: (a) the amount of paperwork, (b) the heavy caseload size, (c) staff shortages, and (d) lack of day program options. Regarding effectiveness of case manager functions performed, recordkeeping was rated least effective and intake the most effective function. In regard to training needs for case manager supervisors, the two areas appearing to need the greatest inservice were assisting clients and their families to become their own case managers and negotiating with service providers and clients. Most supervisors had no college training in case management and 61% had no course work in developmental

disabilities. The average number of inservice training experiences in those areas was three for the majority of respondents, indicating a need for more comprehensive training.

The key findings indicated that of the case manager supervisors surveyed, 17% also carried a caseload averaging 37 clients, in addition to their supervisory responsibilities. Most responding supervisors indicated that all eligible persons with developmental disabilities were receiving services and most agencies had no waiting list for services.

Case Managers

The most significant findings appear to be the case managers' concerns regarding barriers to an effective delivery system for persons with developmental disabilities. These were: (a) too much paperwork, (b) staff shortages, and (c) insufficient funds to accomplish the job. County administration issues did not appear to pose any barriers to effective case management. Another important finding was that the average case load of clients with and without developmental disabilities for each case manager was over 68 persons, a ratio over twice that recommended for effective case management.

Directors

Some of the significant barriers to effective case management cited were: the amount of paperwork, heavy client case load, and the large number of required meetings. Other areas of concern were: lack of funding, funding restrictions, staff shortages, and lack of program service options. In general, over half of the directors appeared to be satisfied with the effectiveness of the case management delivery system and believed that there were no apparent duplications in service with other agencies, while advocates appeared to be dissatisfied with the system's effectiveness.

Directors were also asked if the State of Minnesota should apply for Medical Assistance Funding for case management under the Consolidated Omnibus Budget Reconciliation Act. Of the 60 directors, 95% responded, indicating "yes" that the State should apply.

Recommendations

The Minnesota Case Management Study provided a great deal of information regarding the status of case management in the state. A number of training issues were identified, along with staffing problems and requirements which have diminished the time a case manager has in dealing with client needs. The review of literature failed to identify a case management model which would resolve all the specific issues related to an effective service delivery system. Although increased levels of funding cannot be expected to solve all of the problems and barriers pointed out in this study, exceptionally high case manager-client ratios invariably affect the quality of service to the client with developmental disabilities. All groups identified funding as a serious problem. Directors recommended almost unanimously that the State of Minnesota apply for Medical Assistance Funding under the Consolidated Omnibus Reconciliation Act to gain more funding for case management services. Some states have reduced their case manager case loads and found services greatly enhanced to the client. One such state is Michigan which uses a 1:30 case manager-client ratio. The Minnesota State Department of Human Services was asked to respond to the question of how many additional case managers would be needed to meet a more ideal ratio of 1:30. The following information was gained.

IF there are an estimated 15,000 persons in Minnesota
with developmental disabilities needing case management services,
AND the ratio of one case manager per 30 clients was applied,
THEN 500 case managers would be needed.
SINCE the State employs 290 case managers,
THEN 210 additional case managers would need to
be employed to satisfy the 1:30 ratio.

IF an entry level person with a bachelor's degree earns $25,000 annually and the agency is required to provide benefits, travel, and support services at $10,000 more per case manager for each of the 210 additional case managers, THEN an additional $7,350,000 would need to be added to the existing budget for the Department of Human Services.

The amount of paperwork required of case managers was named as a serious barrier to effective case management. Although specific solutions to problems were not addressed in this study, the innovative projects funded by the Minnesota Governor's Planning Council on Developmental Disabilities point to a possible solution. The Data Integration Projects of Dakota and Itasca counties, a computer-assisted program to reduce paperwork required of human services personnel, appears to hold promise for decreasing time spent on paperwork and increasing time devoted to clients and their needs.

Another recommendation for improving case management services in Minnesota concerns the development of improved and relevant training programs. Appropriate preservice training is extremely important as the university setting should be the trainee's first opportunity to receive consistent and comprehensive philosophy, information, and skills development. Most of the county case managers have received their professional preparation in social work programs which generally, in Minnesota, do not prepare students to work as case managers with individuals with developmental disabilities. In general, social work programs continue to train students for traditional social work roles rather than for roles as service coordinators. The Department of Human Services, Division for Persons with Developmental Disabilities, counties, and universities should implement a cooperative effort toward improving preservice training programs to eliminate the necessity of case managers receiving a fragmented education

after employment. The Minnesota University Affiliated Program and the School of Social Work at the University of Minnesota were awarded a grant from the United States Office of Education, Department of Personnel Preparation, to develop a certificate program for social workers who will be working as case managers for persons with developmental disabilities. The grant recipients and the Department of Human Services, Division for Persons with Developmental Disabilities are working cooperatively on program planning and development. Inservice training for case managers should be better coordinated so that workshops will be offered on a consistent basis and, over time, will present comprehensive philosophy, information, and skills development for case managers in the field. Currently, one logical source for the administration, planning, and delivery of such inservice training would be the Department of Human Services, Division for Persons with Developmental Disabilities. Another would be training provided through an institute or foundation. The Division has undertaken a training program of similar scope, but its implementation has been so recent that no evaluation information is available on its impact.